# Two New Species of the Genera *Pholcus* and *Spermophora* (Araneae: Pholcidae) from the Kyushu, Japan

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入江照雄:九州産ユウレイグモ属およびシモングモ属 (クモ目:ユウレイグモ科)の2新種

**Abstract** Two new species of the genera *Pholcus* and *Spermophora* belonging to the family Pholcidae are described from the Kyushu, Japan, under the names, *Pholcus yoshikurai* sp. nov. and *Spermophora junkoae* sp.nov.

In this paper, I describe a new species of the genus *Pholcus* from the Yakushima Island and Koshikishima Islands, and a new species of the genus *Spermophora* from Ishigakijima Island and Iriomotejima Island.

All the type specimens are deposited in the collection of the National Science Museum (Mat. Hist.), Tokyo.

The abbreviations used in this paper are as follows: ALE, anterior lateral eye; AME, anterior median eye; PLE, posterior lateral eye; PME, posterior median eye; OA, ocular area; Cp, length of clypeus.

I wish to express my hearty thanks to Dr. Makoto YOSHIKURA, Kumamoto, and the late Dr. Takeo YAGINUMA,Osaka, for their constant guidance.

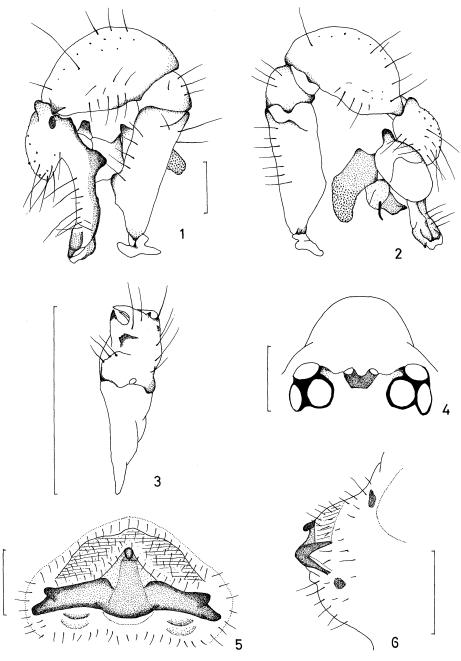
# **Pholcus yoshikurai** sp. nov. (Figs. 1-6)

Measurements of holotype and allotype ( $\nearrow$ / $^{\circ}$ ;in mm). Body length 6.80/6.99. Carapace length 1.82/1.99. width 1.62/ 1.52. Abdomen length 4.98/5.00. width 1.52/ 2.08. Length of legs as shown in Table 1. Eye sizes: AME 0.07/0.10, ALE 0.22/0.21, PME 0.25/0.22, PLE 0.25/0.20. Distances between eyes: AME-AME 0.01/0.05, PME -PME 0.42/0.28, ALE-ALE 0.55/0.37. OA length 0.37/0.35, width 1.00/0.80. Cp 0. 25/0.32.

Male (Holotype): Carapace grayish yellow; slightly longer than the width, with gray dorsal pattern similar to those of *P. nagasakiensis* STRAND, 1916 and *P. bessus* ZHU et GONG, 1991. Eight eyes on the cephalic tubercle, arranged in three groups as usual in the genus *Pholcus*. Rows of anterior eyes are procurve. Chelicera light brown; armed with three teeth-like prominences on the front and a long two teeth on the inner margin of fang furrow. Sternum brownish yellow in back ground; mottled with pale gray patches. Legs very long, brown in back ground, with yellowish white annulations in tip

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Figs. 1-6. *Pholcus yoshikurai* sp.nov. ——1. male Left palp, exo-lateral view.

2. Same, endo-lateral view.

3. Chelicera of male, left ventral view.

4. Eye group of male, dorsal view.

5. Epigynum, ventral view.

6. Same, lateral view. (Scales: 0.5 mm.)

Γable 1.		Measurements	of legs	of	Pholcus yoshikurai sp. nov.		<u>(건/우: in m</u> m	
	Leg	Fumur	Patella+	Tibia	Metatarus	Tarsus	Total	
	I	12.55/11.28	12.95/12	2.25	23.80/20.05	3.20/3.00	52.50/46.58	
	II	9.45/8.48	9.95/8.	71	14.65/12.85	1.85/1.82	35.90/31.86	
	III	7.05/6.55	7.90/6.	45	9.58/8.96	1.54/1.28	26.07/23.24	
	IV	9.45/8.98	8.95/8.	38	13.20/12.15	1.90/1.78	33.50/31.29	

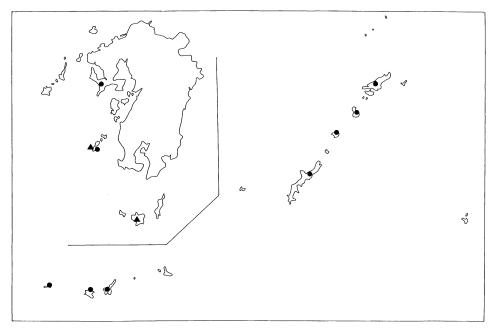


Fig. 7. Distribution of *Pholcus nagasakiensis* STRAND, 1916 and *Pholcus yoshikurai* sp. nov. in the Kyushu, •: *P. nagasakiensis*; •: *P. yoshikurai*.

of the femur and tibia. Leg formula 1, 2, 4, 3. Abdomen cyrindrical, pale yellowish gray with brownish gray patterns.

Male palp: The uncus reddish dark brown; J's shaped similar to that of *P. bessus* and *P. spilis* ZHU et GONG, 1991, also with many minute prominences on the front. The prokursus reddish dark brown, the structure as shown in Figs. 1, 2.

Female (Allotype): Legs shorter than those of the male. Epigynum glossy light brown, the structure as shown in Figs. 5, 6. Other characters as same as in the male holotype.

Type series. Holotype: ♂, Miyanoura, Kamiyaku-chô, Yakushima Island, Kagoshima Prefecture, Japan, 8-VIII-1991, T. IRIE and N. KINOSHITA leg. (NSMT-Ar 3566); allotype, ♀, Kawahara, Kamiyaku-chô, Yakushima Island, Kagoshima Prefecture, Japan, 9-VIII-1991, T. IRIE amd N. KINOSHITA leg. (NSMT-Ar 3567). Paratypes: 1♀1♂, Anbô, Yaku-chô, Yakushima Island, Kagoshima Prefecture, Japan, 17-VIII-1957, M. YOSHIKURA leg;3♀2♂, Sebi, Shimokoshiki-son, Koshikishima Islands, Kagoshima Prefecture, Japan, 9-X-1993, T. IRIE and J. IRIE leg; 2♀1♂,

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Miyanoura, Kamiyaku-chô, Yakushima Island, Kagoshima Prefecture, Japan, 16-VII-1997, T. IRIE and J. IRIE leg..

*Variation* (in mm). Body length  $\nearrow$  6.32-6.90,  $\stackrel{\circ}{+}$  6.72-7.65.

Distribution. Yakushima Island and Koshikishima Islands, Japan (Fig.7).

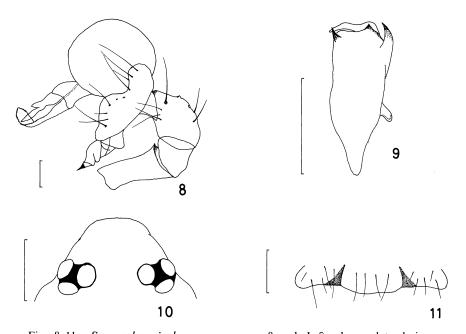
*Remarks*. This new species is similar to *P. bessus* and *P. spilis*, known from China, in shape of the uncus, but is easily distinguishable from other structure of male organ and epigynum.

Etymology. The species is dedicated to Dr. Makoto YOSHIKURA, Kumamoto Prefecture, Japan.

## Spermophora junkoae sp. nov.

(Figs. 8-11)

Measurements of holotype and allotype ( $\nearrow/\ ^+$ ;in mm). Body length 2.21/2.50, Carapace length 0.83/0.75, width 0.73/0.70, Abdomen length 1.38/1.75, width 0.80/1.36.



Figs. 8-11. Spermophora junkoae sp. nov. ——8. male Left palp, exo-lateral view.

9. Chelicera of male, left dorsal view. 10. Eye group of male, dorsal view. 11. Epigynum, ventral view. (Scales: 0.2 mm)

Table 2. Measurements of legs of *Spermophora junkoae* sp. nov.  $(\sqrt[n]{2})$ : in mm)

Leg	Fumur	Patella + Tibia	Metatarus	Tarsus	Total
I	4.07/3.09	4.61/3.34	6.82/4.79	1.41/0.91	16.91/12.13
II	3.24/2.24	3.35/2.27	4.32/2.99	0.94/0.89	11.85/8.39
III	1.98/1.46	1.91/1.52	2.45/1.90	0.43/0.52	6.77/5.40
IV	2.65/2.29	2.61/2.24	3.11/2.68	0.64/0.61	9.01/7.82

Length of legs as shown in Table 2. Eye sizes: ALE 0.07/0.07, PME 0.08/0.77, PLE 0.07/0.07. Distance between eyes: ALE-ALE 0.24/0.23, PME-PME 0.19/0.16, PLE-PLE 0.29/0.24, OA length 0.14/0.13, width 0.40/0.35. Cp. 0.15/0.12.

Male (Holotype): Carapace pale yellow; slightly longer than the width, hairy. With six eyes, in the triads. Chelicera pale brownish yellow; has a long fang and lamella, with long brownish prominence in the basal part of fang. Sternum pale yellow; shield shape, longer than the width. Legs pale brownish yellow; very long and slender, hairy. Leg formula 1, 2, 4, 3. Abdomen pale yellow; oval shaped, longer than the width, hairy.

*Male palp*: Pale yellow; the structure of the male organ more complex, as shown in Fig. 8, having a teeth-like part on the paracybium.

Female (allotype): Body slightly larger than the male. Legs shorter than those of the male. Epigynum pale brownish yellow, the structure as shown in Fig. 11. Other characters as same as in the male holotype.

Type series. Holotype: ♂, Sonai-dake, Iriomotejima Island, Okinawa Prefecture, Japan, 30-VII-1991, T. IRIE and J. IRIE leg. (NSMT-Ar3568); allotype: ♀, Banna-dake, Ishigakijima Island, Okinawa Prefecture, Japan, 11-VII-1994, T. IRIE leg. (NSMT-Ar3569); paratypes: 3 ♀ 2 ♂, Sonaidake, Iriomotejima Island, Okinawa Prefecture, Japan, 30-VII-1991, T. IRIE and J. IRIE leg., 1 ♀ 1 ♂, Maryudo-taki, Iriomotejima Island, Okinawa Prefecture, Japan, 30-VII-1991, T. IRIE and J. IRIE leg., 3 ♀ 6 ♂, Omoto-dake, Ishigakijima Island, Okinawa Prefecture, Japan, 10-VII-1994, T. IRIE leg., 3 ♀ 3 ♂, Arakawa, Ishigakijima Island, Okinawa Prefecture, Japan, 11-VII-1994, T. IRIE leg., 1 ♀ 3 ♂, Banna-dake, Ishigakijima Island, Okinawa Prefecture, Japan, 11-VII-1994, T. IRIE leg.

Variation (in mm). Body length  $\sqrt{1}$  1. 85-2.40,  $\stackrel{\circ}{+}$  2.06-2.34,

Distribution. Ishigakijima Island and Iriomotejima Island, Japan.

*Remarks*. This new species is closely related to *Spermophora akebona* KOMATSU, 1961 described from Honshu and Kyushu, but is easily distinguishable from that in the detailed structure of male organ.

Etymology. The species is dedicated to Mrs. Junko IRIE, Kumamoto Prefecture, Japan.

### 摘 要

九州産のユウレイグモ科の 2 新種を *Pholcus yoshikurai* sp. nov. ヨシクラユウレイグモ (新称) および *Spermophora junkoae* sp. nov. ヒメユウレイグモ (新称) と命名して記載した。

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